

## ABSTRACT OF THE DISCLOSURE

Systems and Methods are described for determining proximity motion of a mobile wireless device around a fixed target node. The present invention provides a method of regressively analyzing the signal strength on a receiver node, which may be either the mobile wireless device or the fixed target node, as a function of time to determine the proximity of the sending node, which may be either the mobile wireless device or the fixed target node, to the receiving node. The method includes detecting motion of mobile wireless device with a fixed wireless device within a proximity range of less than about 15 cm, and more preferably within around 5 cm. The system provides accurate proximity motion sensing that is not susceptible to multipath effects, and which can be implemented in a wide variety of wireless applications.